

the BirdBook

Birds of the Grey Box
Grassy Woodlands in
the Goulburn Broken
catchment

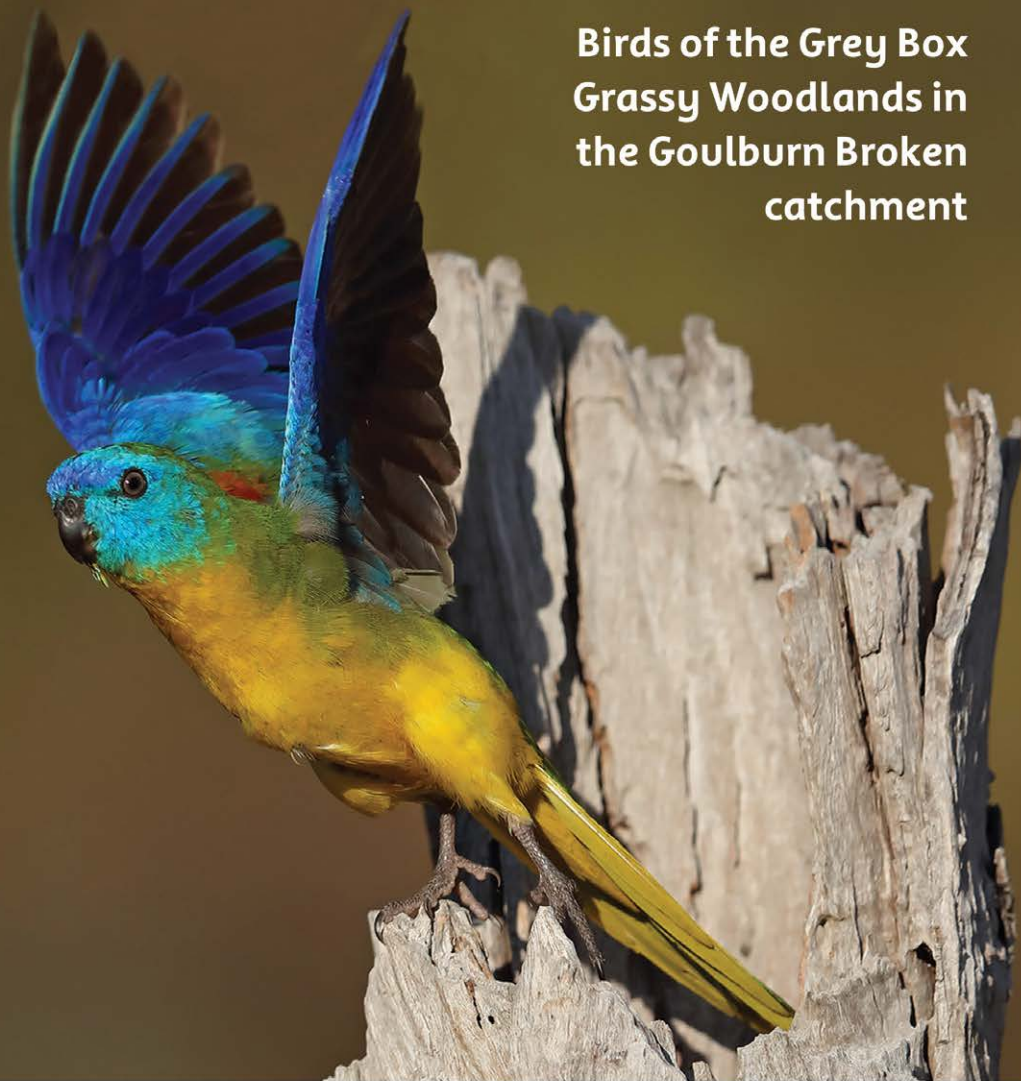




Photo: Diamond Firetail nest. M. Hooper (Goulburn Broken CMA)

The Bird Book features images and information from the lands of the Yorta Yorta and Taungurung people, the Traditional Owners of the lands in the catchment.

Goulburn Broken Catchment Management Authority, Victoria, Australia.

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The Bird Book

Birds of the Grey Box Grassy Woodlands in the Goulburn Broken catchment

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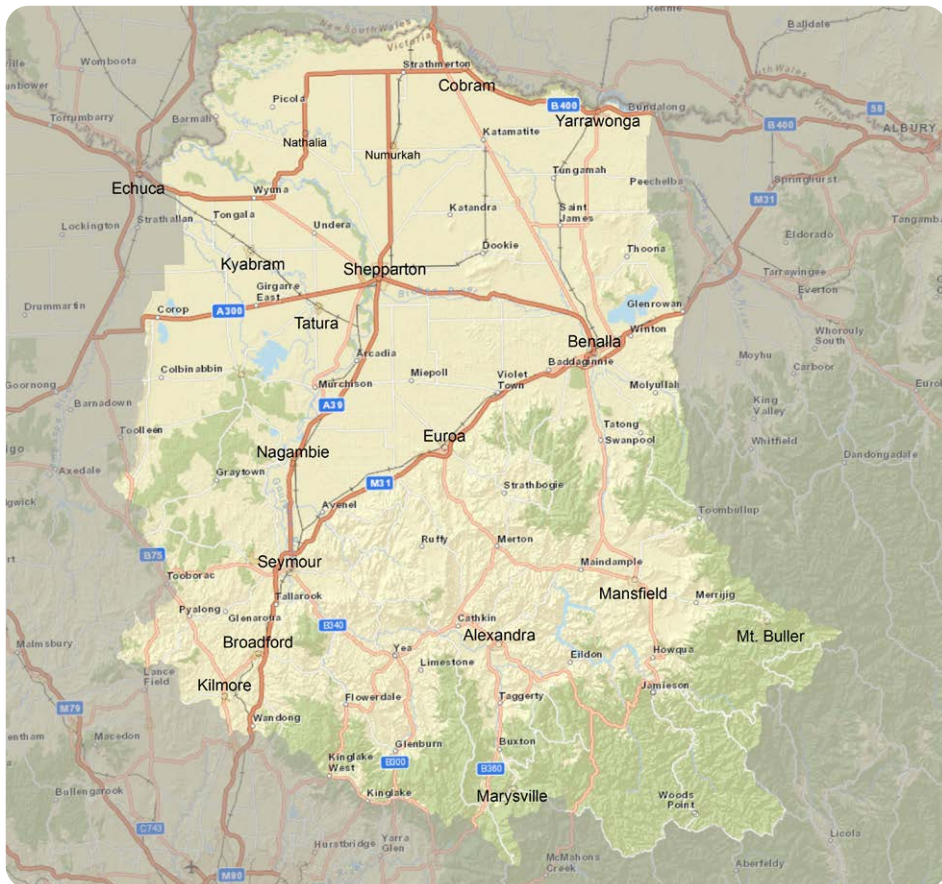
INTRODUCTION

Once, Grey Box Grassy Woodlands and the many species that inhabited them extended across a vast swathe from south-eastern South Australia, through the centre of Victoria into the centre of New South Wales. As this vegetation community is located on prime agricultural land, around 85 per cent of Grey Box Grassy Woodlands have been cleared or degraded since European settlement.

Remaining Grey Box Grassy Woodlands are vital to the survival of many critically endangered, endangered and threatened woodland-dependent birds, several of which belong to the Victorian Temperate Woodland Bird Community.

The Bird Book – Birds of the Grey Box Grassy Woodlands in the Goulburn Broken catchment features snapshots of some of the species living amongst or visiting the Goulburn Broken region, the stunning ‘gems’, the soft ‘greys’ and the iconic ‘black and whites’.

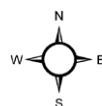




This booklet features 30 bird species that live in or visit the Grey Box Grassy Woodland environment in the Goulburn Broken catchment.



The white area denotes the Grey Box Grassy Woodland region of the Goulburn Broken catchment.



0 30 60
Kilometres

Our woodland birds are precious – therefore so are the woodlands and the associated ecological communities they depend on. The Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia is listed as a threatened ecological community under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Ecological communities are described as a:

...naturally occurring group of plants, animals and other organisms that are living together and interacting in a unique habitat. Its structure, composition and distribution are determined by environmental factors such as soil type, position in the landscape, climate and water availability. Species within each wildlife community interact and depend on each other—for example, for food or shelter. Types of ecological communities listed under national environmental law include grasslands, woodlands, shrublands, forests, wetlands, ground springs and cave communities.

Reference: www.environment.gov.au/epbc/publications/grey-box-booklet.html

Remnants of the once vast Grey Box Grassy Woodland system are now generally restricted to small reserves, roadside strips, patches on private land and travelling stock routes. They are essential to the survival of many critically endangered, endangered and threatened woodland bird species.



BIRDS ON COUNTRY

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The Taungurung Land and Waters Council represents the Taungurung Nation – the First Peoples of the Rivers and Mountains of Central Victoria. The Taungurung people occupy much of central Victoria.

Taungurung Land and Waters Council (TLWC): *Our country encompasses the area between the upper reaches of the Goulburn River and its tributaries north of the Dividing Range. From the Campaspe River to Kilmore in the West, eastwards to Mount Beauty, from Benalla in the north down to the top of the Great Dividing Range, our boundaries with other Aboriginal tribes are respected in accordance with traditional laws.*

The Taungurung people are closely affiliated with their neighbouring tribes through language, ceremonies and kinship ties. We are part of an alliance with the five adjoining tribes to form the Kulin Nation. The Kulin Nation group also shares common dreamtime ancestors, creation stories, religious beliefs and economic and social relationships.

Different versions of Dreamtime stories exist among the Taungurung people. It's important to remember these stories passed down through many generations were shared through spoken word and of course, it is natural for variations to exist. A common belief held amongst Taungurung Clans is that the people belong to one of two *moieties* (social or ritual groups) which are connected to the ancestral beings: *Bundjil* and *Waang*. These moieties traditionally played a role in deciding marriages within a tribe.

Bundjil the Creator: Bundjil the eagle (or eaglehawk) is a creator deity, culture hero and ancestral being. Bundjil has two wives and a son, Binbeal the rainbow. His brother is Pailian the bat. He is assisted by six wirmums or shamans who represent the clans of the Eaglehawk moiety: Djurt-djurt the Nankeen Kestrel, Thara the quail hawk, Yukope the parakeet, Dantum the parrot, Tadjeri the brushtail possum and Turnong the gliding possum.

Waang the Trickster: Waang the Crow is a trickster, culture hero and ancestral being. In the Kulin nation in central Victoria, he was known as Waa (also Wahn or Waang). Legends relating to Waang have been observed in various Aboriginal language groups and cultures across Australia.

<https://Taungurung.com.au/creation-stories/> <https://taungurung.com.au/culture-2/> <https://taungurung.com.au> © Copyright 2021 – Taungurung Land & Waters Council



Photo: Reedy Lake. R. Caldwell (Goulburn Broken CMA)

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The Yorta Yorta people are the Aboriginal Traditional Owners of the area surrounding the junction of the Goulburn and Murray rivers in present-day north-central Victoria and southern New South Wales. Yorta Yorta Nation is comprised of people with an indisputable bloodline to the original ancestors of the Land of Yorta Yorta Nation, and as such their traditional laws, customs, beliefs and sovereignty are intact.

Bird surveys undertaken during 2015-2017 as part of the Sand Ridge Woodland Project importantly involved active participation and involvement of Aboriginal people from the Woka Walla works crew. By engaging Woka Walla, young Aboriginal People have been given the opportunity to participate directly in an important ecological monitoring program.

Participants have acquired skills and scientific knowledge of woodland birds on their traditional lands, how to identify different species, the role they play in ecosystems and the methods by which bird surveys can be undertaken.

This experience has been rewarding and enriching where Western science meets traditional ecological knowledge, for both Aboriginal and non-Aboriginal people alike, to practice and respect the tradition and lore of caring for Country and recognising that woodland birds are a very important part of this story.

Tzaros, C. (2017). Yorta Yorta maloga wanagaga dhunda-n: Birds of the Sand Ridge Woodlands in Yorta Yorta Country. Goulburn Broken Catchment Management Authority, Victoria.



Photo: Bird monitoring on Yorta Yorta Country. J. Begley (Goulburn Broken CMA)



2

WOODLAND GEMS

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The gems of the Grey Box Grassy Woodlands include birds that illuminate in turquoise, gold, bronze and silver as they dart from tree to tree to feed upon insects and nectar.

SWIFT PARROT (*Lathamus discolor*)

Member of the threatened Victorian Temperate Woodland Bird Community

A true 'Winter Wanderer,' the Swift Parrot – or 'Swiftie' – is one of our most adventurous birds. Each winter it migrates from its home in southern Tasmania to feast upon the nectar-rich flowering eucalypt forests of Victoria and New South Wales. However, if flowers are scant, the quality of the nectar poor or the habitat has been cleared, it must venture as far as south-east Queensland to seek food. With just a few hundred birds remaining, this remarkable species is Critically Endangered under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

As well as food scarcity, this beautiful bird faces other challenges. As was the thinking of the time, the not-so-sweet Sugar Glider was introduced to Tasmania during the 1800s, most likely as a pet and to 'improve' the island's fauna diversity. Although the Sugar Glider is a native Australian animal, it is not indigenous to Tasmania. Therefore, Tasmanian animals and birds evolved without the need to incorporate the highly agile and carnivorous Sugar Glider into their survival equation. The nimble Sugar Glider will readily enter Swift Parrot nests to feast on nesting Swift Parrot adults, chicks and eggs. As the population of Swift Parrots is already low, the loss of even a single bird or egg is catastrophic.

Swift Parrots require deep nesting hollows in large old trees, either in the trunk or in the end of a branch. This real estate can take 150 years or more to develop, which is time the Swift Parrot does not have. Artificial nesting hollows – nest boxes – are unfortunately not a 'quick fix'. Swift Parrots prefer natural nesting sites over artificial ones and as the variability and uncertainty of eucalypt flowering events mean they live a nomadic lifestyle, it can be difficult to predict where nest boxes are needed. Nest boxes may also have the adverse effect of attracting unwanted species and the cost of building and installing them in remote locations is considerable. As Swift Parrots only breed in Tasmania, installing nest boxes on the mainland is not an option.

Feathered Fact: The Swift Parrot is the only member of the genus *Lathamus*. Its name means 'Latham's bird of different colours', referencing the ornithologist John Latham and the Latin *discolor* meaning 'different colours'.





The Critically Endangered Swift Parrot is one of Australia's most beautiful parrots. For more information visit <https://birdlife.org.au/news/swift-parrot-identification-guide/> for 'swiftie' facts and identification tips.

REGENT HONEYEATER (*Anthochaera phrygia*)

Member of the threatened Victorian Temperate Woodland Bird Community

The beautiful black and gold lace-patterned Regent Honeyeater is a rare gem in the Goulburn Broken catchment's Grey Box Grassy Woodlands. It is a flagship species, meaning conservation actions undertaken for the 'Regent' benefit a suite of threatened and declining woodland fauna such as the Swift Parrot, Superb Parrot, Brush-tailed Phascogale, Squirrel Glider and Painted Honeyeater. As it is an effective pollinator, the loss of 'Regents' from across the landscape impacts the genetic diversity, health, adaptability and longevity of eucalypt forests and woodlands. With just a few hundred birds remaining, the Regent Honeyeater is Critically Endangered under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

Large flocks of Regent Honeyeaters once extended from Adelaide to the north of Brisbane. They were so plentiful that in 1865 the naturalist John Gould wrote: *"I have occasionally seen flocks of from fifty to a hundred in numbers, passing from tree to tree as if engaged in a partial migration from one part of the country to another..."*. Today only several hundred Regent Honeyeaters remain and with so few birds, previously unconsidered challenges have emerged. For example, fewer Regent Honeyeaters mean young birds are less likely to hear and therefore learn their soft bell-like song, which is vital for attracting a mate.

Once, predation upon the Regent Honeyeater by other native species did not even register a blip on the extinction radar. Now, any predation is catastrophic. Reduced habitat 'real estate' means many animals and birds are forced to occupy smaller and overlapping territories where they must compete for dominance and resources at the expense of the more vulnerable species.

As battle for supremacy across a shrinking landscape ensues, some native birds thwart the Regent Honeyeater's attempts to breed by relentlessly destroying their nests. The Sugar Glider, Common Brushtail Possum, Pied Currawong, Laughing Kookaburra, Pied Butcherbird, Australian Magpie and Australian Raven will also bully and prey upon adult birds, chicks and eggs.



Feathered Fact: The Regent Honeyeater Recovery Team and hundreds of volunteers are working hard to save this beautiful bird. Activities includes biannual Regent Honeyeater searches and a monitoring program, identification banding, genetic studies, radio and satellite tracking, working with landholders on habitat restoration and protection, pest bird control, nest protection, community engagement and education and working with agencies on captive breeding and release programs.



The Regent Honeyeater is one of Australia's most beautiful honeyeaters. 'Saving the Regent Honeyeater: A Conservation and Management Guide' by BirdLife Australia contains interesting case studies, facts, stories, advice and stunning photos. For a copy, visit or contact BirdLife Australia www.birdlife.org.au https://afo.birdlife.org.au/documents/WLRegent_Honeyeater_A4-Bro_v10.pdf

COMMON BRONZEWING (*Phaps chalcoptera*)

Known for its mournful, repetitive *whooo-who* call, the Common Bronzewing is a member of the pigeon family. It lives in a variety of habitats across Australia and has successfully adapted to life in the agricultural landscape.

The Common Bronzewing's gleaming metallic wing patches catch the light as it scours the ground for seeds and small pieces of vegetation. This ever watchful, easily startled bird primarily eats wattle (acacia) seeds, thus highlighting the importance of a healthy, shrubby understorey. Due to its 'dry' diet devoid of moisture-laden insects, it does not venture too far from a water source.

The 'Bronzie' constructs a nest of twigs and sticks, positioned low in a tree or shrub. Both parents incubate the eggs and care for the chicks and produce 'crop milk,' a milky substance regurgitated from the 'crop' (an enlarged part of the oesophagus) to feed their young.

Feathered Fact: Crop milk (also known as 'pigeon milk') is produced by all species of pigeon - male and female. Like mammalian milk it contains fat and protein, but unlike mammalian milk, it does not contain carbohydrate.





DIAMOND FIRETAIL (*Stagonopleura guttata*)

Member of the threatened Victorian Temperate Woodland Bird Community

The tiny Diamond Firetail is a jewel in the Grey Box Grassy Woodland crown. It is adversely affected by the 'cleaning up' of the ground layer of sticks, leaves and small shrubs and plants which essentially shuts down its 'supermarket'. This little bird is listed as Vulnerable in Victoria (Flora and Fauna Guarantee Act Threatened List 2024).

The presence of larger native birds such as the Pied Currawong is also a major threat to the Diamond Firetail. Nest predation increases when a natural area becomes degraded and infested with weedy, invasive vegetation such as Briar Rose, Hawthorn and Cotoneaster which produce abundant, nutritious berries. Consequently, this gastronomic jackpot allows the Pied Currawong to comfortably remain in one place for its feeding requirements and channel its attention toward habitat dominance. Eventually the smaller, non-aggressive Diamond Firetail and similar vulnerable woodland birds are expelled.

Feathered Fact: Good looks are not enough - the Diamond Firetail male must prove his worth to a prospective mate. With a piece of grass or long-stemmed flower grasped in his bill to signify his nest material gathering prowess, the male perches atop a vantage point and 'bobs' up and down to catch a female's eye. As Diamond Firetails are thought to mate for life, a good performance is crucial.

GOLDEN WHISTLER (*Pachycephala pectoralis*)

Golden in name and in nature, the beautiful Golden Whistler lights up the Grey Box Grassy Woodlands with a splash of colour and a melodic song. It is found across most of Australia, as well as Indonesia, Fiji, New Guinea and the Solomon Islands. Only the males are blessed with a golden plumage; females and juveniles are attired in muted brown and grey.

The Golden Whistler feeds upon small fruits and invertebrates and spends much of its time foraging amongst the 'messy' ground layer of leaves, sticks and logs. This is its 'supermarket' and the consequence of 'tidying up' this habitat is simple: No ground layer means no Golden Whistler.

With regards to parenting, the Golden Whistler is a fast worker. Breeding takes place between September and January, with both parents working to construct their shallow nest of twigs, grass and bark bound with spider web. Eggs hatch within 15 days and the chicks leave the nest after just 12 days.

Feathered Fact: The Golden Whistler is a member of the *Pachycephala* family that literally translates to 'thickhead' (pachys 'thick' + kephale 'head'), in recognition of its robust build designed to shovel through the deep ground layer and prise insects from beneath bark.





HORSFIELD'S BRONZE-CUCKOO (*Chrysococcyx basalis*)

The Horsfield's Bronze-cuckoo shimmers and shines as it takes to the air in search of a caterpillar dinner, or to alight upon a high branch in the sunlight to view the surrounding world for dangers and opportunities.

The Horsfield's Bronze-cuckoo is a 'brood parasite,' meaning when it comes to nest construction, it opts to take advantage of the toil of others. When the coast is clear, the female Horsfield's Bronze-cuckoo darts to her chosen nest - often that of a Splendid Fairy-wren or Thornbill - and in a few fast seconds lays her single egg. She departs just as quickly, before the guileless homeowners return. Before leaving she may eject one of the other birds' eggs to maintain the status quo.

The unsuspecting host parents incubate the imposter egg which hatches within 12 days, usually before the other eggs, ensuring the interloper receives its unsuspecting host parents' undivided attention. Like its biological parents, the newly hatched Horsfield's Bronze-cuckoo chick is hard-wired for survival and may eject other eggs or chicks from the nest to eliminate the competition.

Feathered Fact: The Horsfield's Bronze-cuckoo dines predominantly on insects and their larvae. A plump, nutrient laden caterpillar rarely stands a chance when it is ambushed 'mid-rappel' on its silken thread by the skilful swoop of this enterprising bird.



TURQUOISE PARROT (*Neophema pulchella*)

Member of the threatened Victorian Temperate Woodland Bird Community

The Turquoise Parrot once populated extensive swathes of woodland throughout Victoria, New South Wales and southern Queensland. In the early 1900s it was on a trajectory to extinction, largely due to land use change that impacted its nesting and foraging habitat.

Thankfully, populations of this turquoise gem have rebounded, partly due to the careful management of its Grey Box Grassy Woodland habitat and the implementation of artificial nesting habitat projects undertaken by the Goulburn Broken Catchment Management Authority and the Broken Boosey Conservation Management Network in the Glenrowan, Warby Ranges and Chiltern districts of north-east Victoria.

The 'Turq's' nesting requirements are specific. Nesting hollows must be vertical or near vertical, 800 millimetres deep, approximately one and a half to two metres from the ground and a food supply must be nearby. Seed from native shrubs, grasses, herbs, introduced pasture grasses and weeds are on the menu. As it consumes such a dry diet, a reliable water source close to nesting sites is vital. See page 49 - Case Study 3: Turquoise – the colour of success, to read more about the Turquoise Parrot.

Feathered Fact: The Turquoise Parrot is one of six species belonging to the *Neophema* genus. Whilst both sexes of the other species in the *Neophema* genus are similar in colouring, Turquoise Parrots are distinctly different. The male sports a gleaming golden chest, shimmering turquoise face and distinctive red 'wing bar,' whilst the female is quietly understated in muted green, blue and yellow.

SILVEREYE (*Zosterops lateralis*)

At home in Australia and New Zealand, the busy little Silvereye feeds upon aphids, scale and moths to provide a valuable 'ecosystem service' for Grey Box Grassy Woodlands, home gardens and orchards.

BirdLife Australia's 'Birds in Backyards' surveys indicate Silvereye populations are declining; however, the surveys also highlighted changes you can make to help this little bird persist in the environment:

- The Silvereye is less likely to frequent sites where trees cover less than 25 percent of the area, so where possible include local indigenous trees in new plantings.
- The Silvereye is less likely to visit home gardens where over half the area consists of lawn and contains few shrubs or small plants. Thinking about your next gardening project? Reclaim part of your lawn and plant it with local indigenous species.
- The Silvereye is less likely to visit if Noisy Miners are about, as these aggressive honeyeaters will outcompete, bully and harass the Silvereye (and most birds) to exclusion. Planting shrubs and reducing lawn will help to deter Noisy Miners which prefer open spaces. See the case study on page 48 for more information about the Noisy Miner.

Feathered Fact: The Silvereye was first recorded in New Zealand during the 1800s. It is assumed a flock was swept eastwards during a storm, therefore as a self-introduced bird it is protected as a native species. Its Māori name is tauhou meaning 'new arrival'.



RAINBOW BEE-EATER (*Merops ornatus*)

A true woodland gem, the Rainbow Bee-eater dazzles as it pursues an in-flight insect meal (bees or otherwise). It is perfectly designed for the mid-air hunt and is identifiable by its luminous colours, elongated curved bill and aerodynamically efficient tail-streamers.

The Goulburn Broken catchment's Rainbow Bee-eaters are generally migratory. They spend winter in northern Australia and islands beyond, before returning south to summer breeding areas. Both parents select a nesting site in a sandy bank, riverbank, disused quarry or quiet road cutting. In an admirable feat of engineering they use their bill to excavate a 90-centimetre-deep tunnel leading to a grass-lined nesting chamber.

As an aerial insectivore the Rainbow Bee-eater predominantly feeds on bees and wasps, however dragonflies, beetles, butterflies and moths – generally any flying insect – are on the menu. After snapping up its mid-air meal it returns to its perch to beat the insect into a manageable morsel. Wasps and bees are rubbed against the perch to remove the venomous 'sting'.

Feathered Fact: During the 1930s in Queensland, the Rainbow Bee-eater was considered an economic threat to the honey trade and a bounty was paid for its destruction. As proof that beauty can indeed be a curse, this beautiful bird was also harvested for its brilliant feathers and long tail-streamers for the fashionable hat-making trade.





SPOTTED PARDALOTE (*Pardalotus punctatus*)

Weighing in at just 6-8 grams, the pretty little Spotted Pardalote is one of Australia's smallest birds and an important member of the Grey Box Grassy Woodland 'clean-up crew'. If you listen closely, you may hear its tiny bill 'snapping, crackling and popping' as it scours the treetops, pecking away the small, highly destructive sap-sucking insects called psyllids and their sugary 'lerps'.

Lerps are a by-product of psyllids. Psyllids suck sap from the leaves, process the nutrient, excrete the water and use the remaining sugars to construct a 'lerp shield' to shelter beneath. Lerps contain more starch than cane sugar and pack a sweet carbohydrate punch for woodland birds, gliders, possums and bats. An abundance of psyllids can cause a tree to experience stress and dieback, so these native mammals and small woodland bird 'clean-up crews' – known as 'gleaners' – are vital for tree health.

Feathered Fact: The Spotted Pardalote constructs its nesting chamber in a long hollow branch, small tree hollow or in a narrow tunnel excavated in an earthen bank. Should natural habitat be in short supply, this resourceful little bird will also nest inside power pole junction boxes, between gaps in house bricks and even within the centre of a rolled-up garage door.



3

WOODLAND GREYS

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The Woodland greys include birds of soft, muted tones that live in the Goulburn Broken catchment's Grey Box Grassy Woodlands. Each occupies its own ecological niche and contributes towards a healthy, functioning woodland environment.

GREY-CROWNED BABBLER (*Pomatostomus temporalis*)

Member of the threatened Victorian Temperate Woodland Bird Community

The incessant 'babble' of the ever-busy Grey-crowned Babbler affirms its status as one of the region's most iconic woodland birds. Over the past 200 years, broadscale land-clearing in productive agricultural regions across the state has resulted in the loss of this little bird's 'real estate and supermarkets'. Fragmented landscapes impede movement and the opportunity for genetic exchange, territory expansion and population growth. The Grey-crowned Babbler is listed as Vulnerable in Victoria (Flora and Fauna Guarantee Act Threatened List 2024).

The 'Babbler' relies on large old trees for foraging in, on, along and under and young, shorter saplings in which to build its football-sized stick nests. Nest construction is a team effort and families will renovate and re-use nests from year-to-year. As with many small birds, Grey-crowned Babblers are reluctant to fly across large tracts of open land, therefore vegetated corridors and 'stepping stones' or islands of vegetation are vital for safe travel through the landscape.

Grey-crowned Babblers live in co-operative territorial groups consisting of a breeding pair and non-breeding birds. When the colony becomes too large, young birds must leave to establish new territories, which can only be achieved via connected, protective vegetation.

Feathered Fact: The Grey-crowned Babbler is also known as the 'Yahoo Bird' due to its reciprocal 'antiphonal call', meaning the call is made by two birds almost – but not quite - in unison. The *ya* of the female is immediately followed by the *hoo* of the male. To the human ear this exchange resonates as a single call.



WESTERN GERYGONE (*Gerygone fusca*)

Member of the threatened Victorian Temperate Woodland Bird Community

As well as the Grey Box Woodlands of the Goulburn Broken catchment, the Western Gerygone also inhabits the southern half of the Northern Territory and parts of New South Wales, Queensland, South Australia and Western Australia.

Ordinary in appearance, the Western Gerygone makes up for its lack of 'pizzaz' to take the prize as one of the most beautiful, somewhat melancholic, songbirds in the Goulburn Broken catchment. Its song is mostly heard in the springtime when the male calls to attract a mate and assert his breeding territory.

The Western Gerygone builds a dome-shaped 'hanging bottle' nest woven from grass, bark and spider web, suspended from a tree branch approximately two metres from the ground. Both parents construct the nest and incubate and care for the eggs and chicks. As with many species it is adversely affected by vegetation clearing, fragmentation and changes in fire frequency and intensity that affects food availability and nesting resources.

Feathered Fact: The Western Gerygone's musical reputation is reflected in its taxonomic name. *Gerygone* (pronounced *Jer-rig-gen-nee*) comes from the Greek meaning 'born of sound'.





RUFIOUS WHISTLER (*Pachycephala rufiventris*)

The robust little Rufous Whistler is renowned for its complex, long-ranging whistles and trills of varying rhythm and volume, sometimes triggered by a sudden or unusual noise such as a thunderclap or noisy machinery.

The Rufous Whistler depends on healthy, intact woodlands that supply plentiful insect dinners supplemented with seeds, fruits or leaves. Unusual for a whistler, it rarely forages on the ground, preferring to inhabit the mid-storey and treetops. Quick to adapt, it readily colonises revegetated sites after just a few years.

Rufous Whistlers breed in monogamous pairs. Both parents incubate the eggs and care for the chicks, however the female takes charge of nest construction. She creates the cup-shaped nest from twigs, grass and other fine material, bound and attached to a tree fork with spider web. In a good season two broods may be produced.

Feathered Fact: The Rufous Whistler belongs to the same family as the Golden Whistler (*Pachycephala pectoralis*). Like its golden cousin, the Rufous Whistler's taxonomic name recognises its stout physiology (pachys 'thick' + kephale 'head').



PEACEFUL DOVE (*Geopelia placida*)

The Peaceful Dove's rolling, melodic *doodle-doo* call is a characteristic sound of the agricultural and woodland landscape. As a seed eater, it is never too far from the water it needs to process and digest its dry diet.

An intact ground-layer with a native plant understorey of seed-producing native grasses and low herbaceous plants is the Peaceful Dove's 'happy place'. Similar in size to the Diamond Dove (*Geopelia cuneata*) it is identifiable by the blue skin around its eyes and top of the beak and dark barring across its neck and upper chest.

As with all pigeons, both parents produce 'crop milk', a milky substance regurgitated from the 'crop' (an enlarged part of the oesophagus) to feed their chicks.

Feathered Fact: As well as the Goulburn Broken catchment, the Peaceful Dove inhabits parts of Asia including South Burma and the Malay Peninsula, Indochina and eastern New Guinea.

PALLID CUCKOO (*Heteroscenes pallidus*)

'Hawkish' in appearance, the Pallid Cuckoo is the most widely distributed member of the cuckoo family. It is found throughout Australia in woodlands, open forest and agricultural regions where it perches up high for a 'bird's eye view'; watchful and opportunistic.

Being a cuckoo, this clever bird parasitises nests of others, relieving itself of the labour-intensive task of constructing a nest and incubating the eggs. Robin, honeyeater, flycatcher and whistler nests are commonly used. Whilst the unsuspecting homeowners are away, the female Pallid Cuckoo seizes the opportunity to infiltrate a nest, moving quickly to eject an egg from the clutch and replace with her own before making a quick getaway.

The Pallid Cuckoo chick generally hatches first to dispatch the other eggs from the nest so it may receive its foster parent's undivided attention. It grows quickly and usually outsizes its exhausted caregivers who frantically spend their days feeding this strange, demanding baby.

Feathered Fact: The Pallid Cuckoo's characteristic – and unrelenting – monotonous call is the combination of a series of loud notes gradually increasing in pitch, lasting for hours and often into the night. For this reason, the Pallid Cuckoo is sometimes called the 'brain-fever bird'.



JACKY WINTER (*Microeca fascinans*)

Member of the threatened Victorian Temperate Woodland Bird Community

The 'perching and pouncing' Jacky Winter shares its family tree with Australasian robins and flycatchers. It depends on a 'messy' ground layer of sticks, leaves, fallen logs and stumps that provides habitat for the insects it feeds upon and the perching structures from which to launch an ambush.

The soft, muted grey and brown plumage of both sexes is identical. Possibly as nature's way to compensate for this humble attire, the male Jacky Winter deploys his distinctive song to attract a female and maintain territory. Both parents construct their tiny woven cup-shaped nest using grass and bark, bound with spider web, cleverly – and somewhat touchingly – camouflaged with strips of bark on the outside.

The Jacky Winter is one of the species whose population trajectory is quietly receding; it is considered 'common but decreasing'. For such a small bird it requires a large home range of approximately 1.7 hectares of healthy woodland, demonstrating how challenging it is for this and other woodland birds to persist in the landscape.

Feathered Fact: Although not Australia's smallest bird, the Jacky Winter builds the smallest nest. Its taxonomic name *Microeca* is from the Greek *micros* 'small' + *oikos* 'house'.





GREY SHRIKE-THRUSH (*Colluricincla harmonica*)

With theatrical flourish the Grey Shrike-thrush delivers its five-note melody with gusto, referencing its taxonomic name *harmonica*. The male is particularly vocal during breeding season and can be heard up to half a kilometre away.

As it forages for spiders, lizards, frogs, seeds and insects, an intact ground layer of fallen logs, branches, sticks and leaves is a non-negotiable habitat requirement for the Grey Shrike-thrush. With its strong, purpose-built bill it prises insects from behind the peeling bark of large old trees that are essentially its 'supermarket'.

The Grey Shrike-thrush requires access to bushland 10 hectares or larger. It has adapted to life in the human environment where it is known to construct its woven nest inside flowerpots, hanging bike helmets and beneath the eaves of buildings. It generally mates for life and the pair remain in the same location. Upon reaching maturity the chicks move out to establish territories of their own.

Feathered Fact: As a songbird, the Grey Shrike Thrush shares its family tree with other members of the *Passeriformes* (perching songbird) family such as pardalotes, honeyeaters, robins, whistlers, magpies and grass finches. These, along with the 5000-plus other members of the 'Songbird Group', originated 24 million years ago on the land mass that included Australia.



GREY FANTAIL (*Rhipidura albiscapa*)

Male and female Grey Fantails are similar in appearance and behaviour, each sporting the same grey colouring, jaunty fanned tail and enviable aerial athleticism.

The bold little Grey Fantail is an active insect feeder. It requires a healthy, shrubby understorey and will occupy a newly planted area within just a couple of years. For the benefit of these and other insectivorous birds, try to incorporate as many local indigenous and 'insect friendly' plants as possible, whether it be in the garden or the paddock.

This confident little people-friendly bird has effortlessly adapted to life in the urban environment. Motivated by bravado and the prospect of a 'freshly disturbed insect' feast, it can be seen dipping, darting and hovering in the wake of human footsteps.

Feathered Fact: Despite a jittering, fluttering habit that suggests an inability to remain airborne for any length of time, the Grey Fantail is in fact a partial migrant and capable of long-haul flight.

DUSKY WOODSWALLOW (*Artamus cyanopterus*)

Identifiable by its blue bill and cheeky appearance, this stout little bird is a partial migrant, with the southern birds moving north in the cooler months. Within the Goulburn Broken catchment, it is usually observed in eucalypt forests and woodlands in the vicinity of insect-attracting water sources or 'bunched up' in tight little groups along branches or powerlines.

For security, the communal Dusky Woodswallow breeds and raises its chicks in 'neighbourhoods'. At breeding time both parents construct a loose bowl-shaped twig nest in a tree fork, behind a piece of peeling bark or inside a hollow stump or fence post. Both parents incubate the eggs and feed the chicks.

When food is scarce – or victims are plentiful – the Dusky Woodswallow will steal food from other birds. This is a feeding strategy known as *kleptoparasitism* and is employed when the risk and energy required to steal is deemed low compared to the risk and energy required to catch an honest meal.

Feathered Fact: Somewhat confusingly, the Dusky Woodswallow is not closely related to true swallows. Butcherbirds, currawongs and the Australian Magpie are its closest cousins.



BLACK-FACED CUCKOO-SHRIKE (*Coracina novaehollandiae*)

Sometimes, a name is just a name... The Black-faced Cuckoo-shrike is neither cuckoo nor shrike; its name was most likely inspired by its cuckoo-like feather patterning and shrike-like bill. Its taxonomic moniker is from the Greek *Coracinos* 'raven-like' + *Novaehollandiae* 'New Holland'.

The Black-faced Cuckoo-shrike navigates the skies with irregular, undulating flapping alternating with gliding. It sometimes congregates in large aerial flocks where the unsynchronised flying manner presents visual confusion for a would-be predator.

Dietary preferences include insects, caterpillars and other invertebrates either caught in flight or foraged from native trees and shrubs. Small fruits and seeds are also eaten. Large old paddock trees for perching and healthy woodlands with a diverse understorey supporting an equally diverse food supply are vital.

Feathered Fact: The Black-faced Cuckoo-shrike is also known as the 'Shufflewing' due to its odd habit of shuffling its wings along the ground upon landing.



A landscape photograph of a grassy field with trees in the background and a dark overlay containing text.

4

IN BLACK AND WHITE

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Always in style, the classic black and whites of the Grey Box Grassy Woodlands include birds attired in timeless 'after five' plumage.

HOODED ROBIN (*Melanodryas cucullata*)

Member of the threatened Victorian Temperate Woodland Bird Community

As with all Australian robins, the Hooded Robin is not closely related to either the European or American robin, instead it shares its family tree with pardalotes, fairy-wrens and honeyeaters. The male is the only 'black and white' member of the Australian robin cohort; the female is silver-grey.

The Hooded Robin conducts a master class in the 'perch and pounce' method of hunting. It patiently waits upon a low branch, stump or log until prey appears... then pounces. Whether a Hooded Robin remains at a location to forage and breed is largely dependent upon the presence of perching habitat. Therefore, protecting and maintaining large 'messy' patches of woodland that house perching habitat and insect dinners is crucial.

'Cleaning up' the ground layer – sticks, leaves, logs and branches – is not doing the environment a favour. For this little black and white bird whose existence largely depends upon something as basic as a small stump or branch lying on the ground, 'cleaning up' spells disaster.

Feathered Fact: In Victoria, the Hooded Robin is listed as Vulnerable (Flora and Fauna Guarantee Act 1988 Threatened List 2024) due to its decline since the 1980s.



Hooded Robin male (main photo) and female (inset photo).



AUSTRALIAN MAGPIE (*Gymnorhina tibicen*)

The iconic Australian Magpie is a common sight across urban and rural regions, however, there is concern populations are declining in some places. A world without the caroling, confident ‘magpie’ may seem improbable, but serves as a reminder that we must remain vigilant in our ever-changing environment.

The Australian Magpie is renowned for its musical, rolling song, breeding-season swoops and ‘sunbathing’ with outstretched wings on the backyard lawn, nature strip or roadside. With a finely tuned ear it struts purposefully, head tilting, listening for underground prey.

The Australian Magpie is well known as a mascot for several Australian sporting teams. It is also the mascot for New Zealand’s Hawke’s Bay Magpies Rugby Union team, despite its status as a pest species in New Zealand after its introduction during the 1860s.

Feathered Fact: The Australian Magpie comprises of nine recognised subspecies, each with distinctive black and white feather patterns. It is native to Australia and southern New Guinea. Although known as a ‘magpie,’ is not related to the European Magpie.



MAGPIE-LARK (*Grallina cyanoleuca*)

Known also as a 'peewee', 'peewit' or 'mudlark', the Magpie-lark is adept at living in a modified rural landscape and urban locations. The name 'Magpie-lark' is misleading as it has no close relationship to either magpies or larks. Rather, it shares its family tree with the Satin Flycatcher (*Myiagra cyanoleuca*) and the wonderfully named Spangled Drongo (*Dicrurus bracteatus*).

At first glance the Magpie-lark may resemble the Australian Magpie; however, a second look confirms differences in patterning and size, with the Magpie-lark considerably smaller.

Regardless of whether it lives in a rural or urban setting, the Magpie-lark must have access to a water body from where it can collect mud to construct its bowl-shaped nest. The nest is built and secured atop a horizontal branch high above the ground, lined with feathers and grass. Both parents incubate the eggs and if conditions are favourable, multiple clutches are raised.

Feathered Fact: Magpie-larks are one of the 200-or-so species of birds worldwide that sing in duet. The male and female each produce one note per second, about a half-second apart. To the human ear it can be difficult to discern if two birds are singing or just the one.

BLACK-SHOULDERED KITE (*Elanus axillaris*)

The Black-shouldered Kite frequents open grasslands, paddocks and even grassy median strips on the Hume Freeway! It inhabits much of mainland Australia and occasionally northern Tasmania and Bass Strait islands.

As if held by an invisible string, the hovering Black-shouldered Kite suspends itself mid-flight whilst scanning for prey. Once detected, it drops like a stone to grab its meal and fly away before a larger raptor seizes its prize. Prey is eaten either in flight or from a tall lookout such as a standing dead tree.

Before European settlement and the expansion of agriculture, the Black-shouldered Kite dined on a variety of small, native ground dwelling animals; nowadays rabbits and rodents form most of its diet. The arrival of large flocks of Black-shouldered Kites may signify a mouse or locust plague is in motion.

Feathered Fact: As part of the Black-shouldered Kite courtship ritual, the female will flip upside-down in mid-air to grab food offered by the wooing male. Together they construct a large stick nest in a tall tree and incubate three or four eggs for 30 days. After just five weeks the chicks are fully fledged, ready to hover and hunt.



PIED BUTCHERBIRD (*Cracticus nigrogularis*)

The Pied Butcherbird sports a distinctive black hood and a strong hooked bill designed to snare lizards, small snakes, birds and insects. In readiness for a 'long lunch' it will cache food in the fork of a tree or impale it on a sharp twig.

The Pied Butcherbird possesses a repertoire of hunting techniques in its survival toolkit: It will run along the ground to chase down prey, catch flying insects on the wing and fly alongside birds of prey to opportunistically seize smaller birds flushed out by the larger predator.

The female is responsible for nest construction and egg incubation and as recompense is fed by the male and other members of the group. More than one female may use the nest.

Feathered Fact: The Pied Butcherbird's rich and complex flute-like call rivals that of the Australian Magpie. A competent mimic, it can be heard in the early morning or on a moonlit night. Its song varies from region-to-region and there is evidence that Pied Butcherbirds readily improvise to create new melodies.





PIED CURRAWONG (*Strepera graculina*)

Bright-eyed and formidably billed, the Pied Currawong generally migrates from the high country to the Goulburn Broken catchment in winter to seek a temporary home with sufficient food and territory. If provisions are plentiful it may choose to spend the summer.

Once settled, the Pied Currawong generally remains in one area. The importance of large patches of healthy bushland is evident, as this big hungry bird requires a constant supply of seeds, reptiles, frogs, insects, bird eggs, chicks and small mammals. Ever resourceful, it will cache food in a 'larder' for future consumption and has adapted well to life in urban areas to address any 'sustenance shortfall'.

The Pied Currawong will spend considerable time among the treetops compared to its predominantly ground-foraging Australian Magpie cousin. These 'lifestyle differences' demonstrate the need for healthy, complex bushland and its various layers that meet the requirements of different species occupying the same location.

Feathered Fact: There is credible concern that in some regions Pied Currawong populations have become artificially high due to human influence and gardening choices. Non-native berry-producing garden plants that 'escape' into bushland, provide the Pied Currawong with an abundant food source, whilst its bold personality is endearing to well-meaning people who enjoy hand feeding them. Elevated food security enables habitat dominance, which although a bonanza for the Pied Currawong and its cohort of similar dominant species, places pressure on small, vulnerable woodland species that must attempt to survive whilst navigating the presence of much larger predators.



RESTLESS FLYCATCHER (*Myiagra inquieta*)

With a quiver and flick of its tail, the Restless Flycatcher alights from a branch, fencepost or stump to hover and flush insects from the ground layer. Between these forays, it perches to scan for its next meal.

The Restless Flycatcher depends upon a healthy and abundant insect population. As with all insectivores, there is concern for its future due to the use of pesticides in the environment and a decline in the abundance and quality of woodland habitat that supports this food source.

This busy little flycatcher constructs a small cup-shaped nest of bark, grass, lichen and even old spider egg sacs. It prefers to nest in a tree fork situated above or near to water, most likely for safety and the presence of insects. Both parents construct the nest and incubate and care for the chicks.

Feathered Fact: The Restless Flycatcher is also known as a 'scissor grinder' due to the sound of its distinctive fast-paced whirring call, like that made by scissors when held against a sharpening stone.

WHITE-WINGED CHOUGH (*Corcorax melanorhamphos*)

The White-winged Cough generally congregates in large groups along roadside verges and amongst treed areas where it chatters, squawks, scratches and pecks through the ground layer. Although similar to a raven or currawong, its distinctive curved bill and red eyes sets it apart, along with its white wing patches, visible in flight or when flapping at family members.

As with many woodland birds, the White-winged Cough relies on the ground layer to supply a feast of insects, larvae, small reptiles and seeds. When roadsides and treed areas are 'tidied up' Coughs and a multitude of other species are denied their next meal.

White-winged Cough flocks sometimes contain 'kidnapped' birds. Two groups will come together to mingle, whereupon at some point a selected bird is detained as its family flies away. This is a harsh yet effective tactic that most likely evolved to reduce inbreeding.

Feathered Fact: All members of the Cough family pitch in to incubate, defend, tend and feed the chicks, although not all have the chicks' best interests at heart. In a remarkable example of cunning and forward planning, juvenile White-winged Coughs will sometimes make a show of feeding their nestling kin until watching eyes are averted long enough so they can eat the food themselves.



WHITE-WINGED TRILLER (*Lalage tricolor*)

The cheerful, canary-like 'trill' of the White-winged Triller is often heard before the bird is seen. This songbird is a migrant from northern Australia and visits the Goulburn Broken catchment's Grey Box Grassy Woodlands and surrounds to breed in spring and summer.

The White-winged Triller forages for invertebrates amongst the fallen leaves, sticks and twigs, demonstrating the importance of a healthy, messy, intact ground layer. It will also hunt for insects on trees and happily feeds upon nectar.

The White-winged Triller constructs a small cup-shaped nest of bark, spider web and grass on horizontal branches or in tree forks. It may also use the empty nests of other birds such as its 'black and white' colleague, the Mudlark. In an admirable feat of efficiency, incubation is fast and clutch sizes are small, with two or three chicks hatching after two weeks and fledging after 12 days. Such a fast turnaround enables the White-winged Triller to raise multiple clutches when food is plentiful and conditions amenable.

Feathered Fact: Male and female White-winged Trillers have a very different appearance. The breeding male takes the honour as the true 'Black and White,' whilst the non-breeding males and females are grey and brown.





WILLIE WAGTAIL (*Rhipidura leucophrys*)

Full of bluster and attitude, the Willie Wagtail is a familiar member of the Grey Box Grassy Woodlands 'black and white' cohort. This busy little songbird sports distinctive 'angry bird' white eyebrows and an air of self-importance as it frantically defends its territory against all interlopers, perceived and otherwise. With unadulterated confidence, it harasses birds many times larger than itself.

The Willie Wagtail is equally at home in the Grey Box Grassy Woodlands and the urban backyard. It is predominantly an invertebrate feeder, but will occasionally dine upon small lizards and frogs. An accomplished aviator, the Willie Wagtail expertly manoeuvres through the air to catch any insect it disturbs with its twisting, jaunty movements and incessantly wagging tail.

It constructs its small cup-shaped nest from woven grasses and spider web and lines it with grass, feathers or soft animal hair. Ever resourceful, the Willie Wagtail parents may re-use the nest or recycle it for spare parts in subsequent breeding seasons.

Feathered Fact: During moonlit nights and the August-February breeding season, the male Willie Wagtail announces his presence and advises against competition by projecting his strident, unrelenting call.

CANARIES IN THE COALMINE: DECLINE AND EXTINCTION IN AUSTRALIA

Sustained changes in bird populations, breeding habits, behaviours and migration are often in response to environmental change and serve as an 'early warning system' for ecosystem decline. Considering our dependence upon secure food production, clean water and climate stability, we humans are wise to take heed of the ways of birds.

Over the past 250 years, 22 Australian bird species have become extinct and at least 216 are at some level of risk:

- 23 species are critically endangered.
- 74 species are endangered.
- 87 species are vulnerable.
- 32 species are near threatened.

Even common species such as the Willie Wagtail, Boobook Owl and Australian Magpie are experiencing population decline in certain locations. The causes are complex and many, and may include:

- Predation: Cats and foxes kill millions of birds annually in Australia and are considered a substantial extinction threat to 37 bird species.
- Habitat loss: Land clearing and habitat modification have resulted in the significant decline of 55 bird species.
- Wildfire: The Black Summer bushfires of 2019-20 contributed towards 27 bird species becoming listed as threatened.
- Climate: Ninety-one bird species are threatened by drought and heatwaves.

Reference:

<https://www.nespthreatenedspecies.edu.au/publications-and-tools/how-many-birds-are-killed-by-cats-in-australia>

<https://theconversation.com/native-birds-have-vanished-across-the-continent-since-colonisation-now-we-know-just-how-much-weve-lost-176239> Published: February 7, 2022.



A PICTURE PAINTS A THOUSAND WORDS...

The devastation cats wreak upon Australia's birdlife is highlighted in the painting *Here Kitty* by Tatura artist Christine Hartley, displayed at the Shepparton Art Museum in 2023. Representing the magnitude of the 'cat problem' is this oversized, defiant cat, its mouth stuffed with feathers. The single feather floating to the ground tells the story of loss and destruction.



Case study 1: AT THE GROUND LEVEL

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The ground storey is vital habitat for woodland birds. It provides camouflage and enables ground-dwellers to feed, hunt, avoid predators and rest through the day. A diverse ground layer is fundamental to the 'natural maintenance' of our rural ecosystems and healthy, functioning ecological processes.

What can you do?

- **Look upon fallen logs, branches, sticks, and leaves as a valuable resource.** If it is in the wrong place, relocate it where possible, to a safe area so it may become 'real estate and supermarkets' for native birds and other fauna.
- **Don't stack it – spread it!** Relocate large logs around the 'drip line' of paddock trees. This will limit the impact of concentrated stock camping, and reduce soil compaction, excess manure and nutrient build up, soil erosion and changes to soil biology. Do not stack logs directly beneath trees, as this will create a harbour for pest animals and become a concentrated fuel source that will most likely kill the tree should fire occur.
- **Leave some large logs scattered around the paddock.** Logs are habitat and refuge for native species, protect the soil and emerging seedlings (the next generation of paddock trees) and are useful scratching stations for stock. Woodland birds and other fauna are more inclined to move across open paddocks when presented with a network of scattered log 'stepping stones'.
- **Leave fallen logs, sticks, and leaves and start a new neighbourhood trend.** You are not lazy if you don't 'clean up!' It shows you appreciate the ground storey as an important and valuable resource that contributes towards your property's health and your area's ecological diversity.
- Whilst it is important to retain the ground layer for land and soil health and native wildlife habitat, life and assets should not be placed at risk by retaining material in areas that, should they be impacted by fire, may cause harm. In accordance with CFA recommendations, landholders are encouraged to keep a clear area around the house and other assets and prepare a fire plan. For further information visit <https://www.cfa.vic.gov.au/plan-prepare/fire-safety-on-the-farm>. Copyright 2018 Country Fire Authority (CFA).





J. Mentiplay-Smith. (Goulburn Broken CMA)

Case study 2: A NOISY PROBLEM

The arrival of Europeans to Australia heralded an upheaval in landscape use that instigated the extinction or decline of many native bird species. However, for some species, these changes serve them well. The removal of large tracts of bushland, the creation of linear roadside vegetation and the transformation of woodlands into cleared farmland dotted with trees and no understorey has inadvertently created the 'perfect storm' of habitat type favoured by the aggressive, native Noisy Miner (*Manorina melanocephala*).

Noisy Miners are incredibly fierce and live within a well organised social structure that facilitates territorial defence on a constant, unrelenting basis. Noisy Miners are listed as a 'Key Threatening Process' under national and state environmental law. They are recognised as one of the main contributors to the decline of Regent Honeyeaters, Hooded Robins, Jacky Winters, Varied Sittellas and Diamond Firetails, amongst many others.

What can you do?

- **Habitat modification:** Planting shrubs and understorey species is something you can do in established patches of vegetation on your property and in your garden. Although the results are not immediate, the benefits are long-term. Noisy Miners do not tend to occupy denser, more complex 'messy' areas of vegetation, which is why they also frequent urban parks and golf courses. By increasing the structural complexity of vegetation on your property and in your garden, you may help to deter Noisy Miners from moving in (or staying), whilst providing a refuge for smaller birds.
- **Reduce 'heavy nectar' species in your garden:** 'Bird attracting' hybrid forms of garden plants such as some grevilleas and callistemons are almost too successful! Consequently, gardens can become overrun by Noisy Miners feasting upon this rich food source at the exclusion of all others. By planting local indigenous plants that produce less nectar, the birds and insects that need them the most will benefit and Noisy Miners will seek food elsewhere.
- **A word on culling:** Culling is not always the 'fix all' solution. Noisy Miners are a social and well organised species and recolonisation after culling, or the cull having minimal effect due to the strong social dynamics of the flock, is common. Should culling be deemed necessary, it requires a permit, sound justification, guidance by experts and must be undertaken professionally.



Case Study 3: TURQUOISE – THE COLOUR OF SUCCESS

Once considered extinct, the rebound of the Turquoise Parrot (*Neophema pulchella*) is a promising 'against the odds' story. Its original range extended from Southern Victoria to south-east Queensland, however during the mid to late 1800s as the landscape transformed from a lightly timbered temperate woodland into cleared farmland, populations sharply declined.

Nevertheless, this tenacious little bird had one trick up its feathery sleeve and played its advantage: It adapted and survived in the hillier, less fertile country where clearing vegetation for agriculture proved too challenging and unprofitable. During the 1930s it re-emerged in New South Wales and Queensland and by the 1950s it had returned to Victoria in the Warby Ranges and surrounding areas at the eastern edge of the Goulburn Broken catchment.

The rebound of the Turquoise Parrot is due to a combination of factors:

- It nests in low hollow stumps or hollow branches. When land was cleared in times past, trees were felled by hand. Therefore, the stumps generally stood at waist or chest-height. Over 100-or-so years, the stumps rotted internally to – somewhat ironically – become Turquoise Parrot nesting habitat.
- The introduction of the myxomatosis virus in the 1950s to control rabbits enabled seed producing grasses and shrubs –Turquoise Parrot food –to re-establish and flourish.
- Its adaptability! As well as dining on the seed of native species, the Turquoise Parrot modified its diet to include introduced grass and weed seed.
- The expansion of agriculture adjacent to hilly woodland habitat increased permanent water in the landscape, such as dams and stock troughs. As the Turquoise Parrot only eats dry seed, it needs and directly benefits from, this reliable agricultural water supply.
- The establishment of state and national parks such as the Warby Ovens National Park in northeast Victoria has protected key woodland bird habitat.
- Community engagement and dedicated projects to increase awareness and habitat protection and enhancement is an important part of the Turquoise Parrot story. Beginning in 2014, the Goulburn Broken Catchment Management Authority and the Broken Boosey Conservation Management Network have delivered seven Turquoise Parrot projects with a focus on increasing community awareness, protecting and increasing woodland habitat and building and installing 580 Turquoise Parrot nest boxes.





Case Study 4: CALL OF THE CURLEW

The Bush Stone-curlew (*Burhinus grallarius*) is one of the Goulburn Broken catchment's most iconic woodland birds. In the 1940s and 1950s it was common in northern Victoria and often observed in large flocks of 50-100 birds. Surveys conducted in 1985 revealed just 300 breeding pairs and a follow up survey in 1991 recorded further decline. The Bush Stone-curlew is critically endangered in Victoria and continues to experience local extinction throughout the Goulburn Broken catchment.

The Bush Stone-curlew is generally nocturnal; throughout the day it will lie or stand motionless, camouflaged amongst the safety of fallen logs and branches. At night it will hunt and cry its distinctive 'weer-lo' call.

Bush Stone-curlews consume a diet of insects, slugs and snails, small reptiles, seeds and occasionally small mammals, all of which rely upon the presence of a healthy and diverse ground storey 'supermarket.' The female lays her eggs directly on the ground within a small, shallow 'scrape' nearby fallen branches, logs and vegetation. Here the parents and chicks are relatively safe from predators and can access food amongst the fallen timber and vegetation. Loss of this habitat is the leading reason why chicks starve and perish.

Fox predation and habitat destruction are generally regarded as main factors in the overall decline of the species. The removal of entire 'supermarkets and real estate' by burning fallen timber, especially in isolated vegetation patches, signifies 'game over' for the Bush Stone-curlew. Once forced into the open, predators and lack of food and shelter make survival impossible.

What can you do?

- **Predator control is vital:** If you live on a property where fox control is a viable option, the region's Bush Stone-curlews (and other native fauna) will thank you!
- **Habitat protection is essential:** Fencing remnant vegetation - even small patches - from livestock and preserving the branches and debris on the ground is a 'game changer' for the Bush Stone-curlew and other woodland species.
- **Let us know!** If you have a Bush Stone-curlew on your property or know where they may be, please contact reception@gbcma.vic.gov.au As it is a critically endangered species in Victoria, every bird is important.



Become A Citizen Scientist For Woodland Birds

Submitting your birding records is one of the most important things you can do to help woodland birds. This information can influence where funds are allocated and how conservation projects and land management programs are developed.

e-Bird Australia enables the collection of field observations and data via a real-time online checklist program. Visit <https://ebird.org/australia/home> scroll down and click on 'Get Started' to register.

Birdata is BirdLife Australia's living, growing database. By collating data submitted by citizen scientists it directly contributes to the preservation of Australia's birds. Each submission makes a difference by:

- Providing quantifiable evidence to determine a species' status.
- Identifying population decline in common birds and acting as an 'early warning system' to ascertain which species are at risk.
- Informing BirdLife Australia's conservation strategy, research, development and land management decisions.

Visit <https://birdata.birdlife.org.au> and click on 'Sign Up' to register and start recording.



Photo: J. Mentiplay-Smith (Goulburn Broken CMA)



Photo: J. Mentiplay-Smith (Goulburn Broken CMA)

The Swift Parrot Search combines targeted surveys for Swift Parrots, Regent Honeyeaters and other woodland birds by using rapid habitat assessments across more than 2,000 permanent monitoring sites on public land throughout south-eastern mainland Australia. To gather this data, citizen scientists undertake a 5-minute/50-metre radius search at each fixed site location and upload the results through the Birdata app on their mobile phone.

Visit <https://birdlife.org.au/swift-parrot-search-faq/>

The Aussie Bird Count is a BirdLife Australia citizen science event conducted over seven days each spring where everybody can contribute to the national bird database. Observations are submitted through the online web form or via the free Aussie Bird Count app.

Visit <https://aussiebirdcount.org.au>

Birds in Backyards is BirdLife Australia's citizen science research, education and conservation program that focuses on the 'common' urban birds. Birds in Backyards provides information on how to survey and identify birds and create bird-friendly habitat. Visit <https://www.birdsinbackyards.net/>

Appendix 1. Species list and Victorian listing 2024

GEMS

Swift Parrot	<i>Lathamus discolor</i>	Critically Endangered
Regent Honeyeater	<i>Anthochaera phrygia</i>	Critically Endangered
Common Bronzewing	<i>Phaps chalcoptera</i>	Not listed
Diamond Firetail	<i>Stagonopleura guttata</i>	Vulnerable
Golden Whistler	<i>Pachycephala pectoralis</i>	Not listed
Horsfield's Bronze-cuckoo	<i>Chrysococcyx basalis</i>	Not listed
Turquoise Parrot	<i>Neophema pulchella</i>	Vulnerable
Silvereye	<i>Zosterops lateralis</i>	Not listed
Rainbow Bee-eater	<i>Merops ornatus</i>	Not listed
Spotted Pardalote	<i>Pardalotus punctatus</i>	Not listed

GREYS

Grey-crowned Babbler	<i>Pomatostomus temporalis</i>	Vulnerable
Western Gerygone	<i>Gerygone fusca</i>	Not listed
Rufous Whistler	<i>Pachycephala rufiventris</i>	Not listed
Peaceful Dove	<i>Geopelia placida</i>	Not listed
Pallid Cuckoo	<i>Heteroscenes pallidus</i>	Not listed
Jacky Winter	<i>Microeca fascinans</i>	Not listed
Grey Shrike-thrush	<i>Colluricincla harmonica</i>	Not listed
Grey Fantail	<i>Rhipidura albiscapa</i>	Not listed
Dusky Woodswallow	<i>Artamus cyanopterus</i>	Not listed
Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	Not listed

BLACK AND WHITES

Australian Magpie	<i>Gymnorhina tibicen</i>	Not listed
Magpie-lark	<i>Grallina cyanoleuca</i>	Not listed
Black-shouldered Kite	<i>Elanus axillaris</i>	Not listed
Hooded Robin	<i>Melanodryas cucullata</i>	Vulnerable
Pied Butcherbird	<i>Cracticus nigrogulari</i>	Not listed
Pied Currawong	<i>Strepera graculina</i>	Not listed
Restless Flycatcher	<i>Myiagra inquieta</i>	Not listed
White-winged Chough	<i>Corcorax melanorhamphos</i>	Not listed
White-winged Triller	<i>Lalage tricolor</i>	Not listed
Willie Wagtail	<i>Rhipidura leucophrys</i>	Not listed

Reference:

Flora and Fauna Guarantee Act 1988 Threatened List February 2024

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Appendix 2. The Victorian Temperate Woodland Bird Community

- The Victorian Temperate Woodland Bird Community is defined as a declining suite of bird species predominantly associated with drier woodlands on the slopes and plains north of the Great Dividing Range.
- These woodlands were once lightly timbered with a shrubby understorey, grassy ground cover, fallen timber, large old trees, tree-hollows and other nesting sites. Various food sources (seeds, nectar and insects) were present throughout the year.
- The distribution of species throughout the woodlands varies. Many are closely associated with (but not exclusive to) the drier northern Victorian woodlands dominated by box, stringybark, ironbark, yellow gum, river red gum, buloke or cypress-pine. However, some species may also frequent or occupy other habitats in Victoria and interstate.

The following species are members of the 24-member threatened Victorian Temperate Woodland Bird Community as declared under the Flora and Fauna Guarantee Act (1988).

Apostlebird	<i>Struthidea cinerea</i>
Barking Owl	<i>Ninox connivens</i>
Black-chinned Honeyeater	<i>Melithreptus gularis</i>
Brown Treecreeper	<i>Climacteris picumnus</i>
Brown-headed Honeyeater	<i>Melithreptus brevirostris</i>
Bush Stone-curlew	<i>Burhinus grallarius</i>
Diamond Firetail	<i>Stagonopleura guttata</i>
Fuscous Honeyeater	<i>Lichenostomus fuscus</i>
Grey-crowned Babbler	<i>Pomatostomus temporalis</i>
Ground Cuckoo-shrike	<i>Coracina maxima</i>
Hooded Robin	<i>Melanodryas cucullata</i>
Jacky Winter	<i>Microeca fascinans</i>
Little Lorikeet	<i>Glossopsitta pusilla</i>
Painted Button-quail	<i>Turnix varia</i>
Painted Honeyeater	<i>Grantiella picta</i>
Red-capped Robin	<i>Petroica goodenovii</i>
Red-tailed Black-Cockatoo	<i>Calyptorhynchis banksii</i>
Regent Honeyeater	<i>Anthochaera phrygia</i>
Speckled Warbler	<i>Chthonicola sagittata</i>
Superb Parrot	<i>Polytelis swainsonii</i>
Swift Parrot	<i>Lathamus discolor</i>
Turquoise Parrot	<i>Neophema pulchella</i>
Western Gerygone	<i>Gerygone fusca</i>
Yellow-tufted Honeyeater	<i>Lichenostomus melanops</i>

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<https://www.environment.vic.gov.au/conserving-threatened-species/threatened-list>

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<https://www.environment.vic.gov.au › threatened-list>

<https://www.nespthreatenedspecies.edu.au/publications-and-tools/how-many-birds-are-killed-by-cats-in-australia>

<https://www.swifft.net.au>

RECOMMENDED READING

Atlas of Living Australia - find and record wildlife in your area <https://www.ala.org.au/>

Australian National University Difficult Bird Research Group website: <https://www.difficultbirds.com/>

Birdlife Australia website www.birdlife.org.au

Birdlife Australia Woodland Birds <https://birdlife.org.au/programs/woodland-birds>

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Regent Honeyeater project (Lurg Hills, north-east Victoria): <http://regenthoneyeater.org.au>





Photo: J. Mentiplay-Smith (Goulburn Broken CMA)

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